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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/630,419 | 07/30/2003 | William Randolph Schmidt | MP0974 | 7838 |

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BRINKS HOFER GILSON & LIONE/MARVELL
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| EXAMINER | |
|---|---|
| MCLEAN, NEIL R | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2625 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 12/14/2010 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Advisory Action Before the Filing of an Appeal Brief | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/630,419 | SCHMIDT, WILLIAM RANDOLPH | |
| | Examiner | Art Unit | |
| | Neil R. McLean | 2625 | |

*--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

THE REPLY FILED 22 November 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *36, 39-42, 44-46, 48-52, and 62-*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625

/Neil R. McLean/
Examiner, Art Unit 2625

Continuation of 13. Other: Regarding Applicant's Argument (page 7, lines 15-21):
"Therefore, none of Jeyachandran, Hartman, Nozaki, or combinations thereof teaches or suggests "the print server module is configured to generate a print server interrupt signal in response to detecting the print job, and the processor is configured to interrupt the at least one print function and perform a print server function in response to receiving the print server interrupt signal," as recited by claim 36. Accordingly, Applicant respectfully requests that the rejection of independent claim 36 as well as dependent claims 39-42, 44-46, and 48-52 be withdrawn.

Examiner's Response:
The Examiner respectfully disagrees with Applicant's assertion that the Nozaki reference does not interrupt a print job for a print server function, in particular that Nozaki lask "a processor…configured to interrupt the at least one print function and perform a print server function in response to receiving the print server interrupt signal." Applicant argures by inferring that a secondary reference such as the Nozaki reference is missing a feature that is contained in a different reference. The Examiner in writing this obviousness rejection is not suggesting that the claimed invention is espressly suggested in any one of the cited references but rather the teaching of each reference when combined would have been obvious to one of ordinary skill in the art.

Regarding Claim 36: (Currently Amended)
Jeyachandran discloses a printer formatter comprising:
a processor (Controller 602) to perform at least one print function associated with a print job (Control unit 602 handles the processes for Print Job, Send Job, Cancel Job, and Send Notification and Receive HTTP Notification; Column 30, lines 22-24);
a system input/output (I/O) (Command Analysis/Process Unit 208) associated with the processor to receive an input signal and provide an output signal (e.g., Client request is received by the Command Analysis/Process Unit 208 which outputs command or print job to the Database 104; Column 18, lines 15-18);
a formatter controller module (Conversion Control Unit 603) configured to perform at least a first formatting function associated with the print job using the processor (A format conversion is performed using an appropriate image conversion library; Column 29, lines 28-30); and
a print server module (Server 103; Note: Server 103 is within printing device; Column 19, lines 29-31) configured in communication with the processor (e.g., Client requests are transmitted to the server component 103; Column 18, lines 2-3), to manage a print queue using the processor (Server 103 communicates with the database 104 via the database manager 209 to add or to update a job, or to acquire data; Column 18, lines 32-34);

Jeyachandran discloses all of the above limitations, including wherein the processor (602), the system I/O (208), the formatter controller (603), and the print server (103) are all located within the printer (Figures 1 and 6).
However, Jeyachandran does not disclose expressly a substrate including a microchip comprising the processor, the system I/O, the formatter controller module, and the print server module.
Hartmann discloses wherein multiple devices are on a single chip (Figure 1; Computer Chip 100 comprising a plurality of reconfigurable logic networks. The chain of logic networks 110 may be of any length, either limited to a single integrated circuit 100, or passing various inputs and outputs between a plurality of integrated circuits 100. Each integrated circuit 100 may be identical or specialized in a special purpose configuration; Column 6, lines 10-14).
Hartmann & Jeyachandran are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose methods of processing and controlling the transmission of data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to disclose a substrate including a microchip comprising the processor, the system I/O, the formatter controller, and the print server. The suggestion/motivation for doing so is to decrease cost and improve performance by using an integrated circuit in which all the components needed for a computer or other system are included on a single chip. Hartmann also discloses wherein instructions can be stored in memory which can be read by the processor 150 (Column 4, lines 57-67) and executed. The Examiner equates these 'instructions' to be equivalent to the Applicant's 'modules' in that they are not dedicated hardware per se but software running on a processor.
It is well known in the art that cost is low because the chips, with all their components, are printed as a unit and not constructed one transistor at a time. Furthermore, much less material is used to construct a circuit as a packaged IC die than as a discrete circuit. The performance of ICs is high because the small size allows short traces which in turn allows low power logic to be used at fast switching speeds. Hartmann discloses in the Background of Invention that chip makers can place an excess of 50 million transistors on a single integrated circuit (Column 1, lines 24-38). Hartmann further discloses a need for a system and method that will bring broad varieties of applications with dynamically reconfigurable logic networks for processing in a system on a chip (SoC). Therefore, it would have been obvious to combine Hartmann's integrated circuit on a single computer chip with Jeyachandran's printing system to obtain the invention as specified to lower the cost per unit and increase the speed of a printing system.

The combination of Jeyachandran & Hartmann do not disclose expressly a processor that is configured to interrupt the at least one print function and perform a print server function in response to receiving the print server interrupt.
Nozaki discloses a processor (controller 20 residing in print server 2) that is configured to interrupt the at least one print function (Interrupt control table 56 of Figure 3. Figure 4 shows print interrupt condition information) and perform a print server function in response to receiving the print server interrupt (e.g., suspend printing upon completion of printing, send error notice, create spool file, or select from the print spool files stored temporarily based on the interrupt printing condition information as described at [0040] and [0041]).
Jeyachandran, Hartmann & Nozaki are combinable because they are from the same field of endeavor of image processing. At the time of

the invention, it would have been obvious to a person of ordinary skill in the art to interrupt the at least one print function and perform a print server function in response to receiving the print server interrupt. The suggestion/motivation for doing so is create a process wherein a client can prioritize the way in which print requests are handled. Therefore, it would have been obvious to combine the printer formatter of Jeyachandran & Hartmann with the interrupt printing control function of Nozaki to obtain the invention as specified to take into account a clients priorities when executing print jobs.